

ENVIRONMENTAL ASSESSMENT
AK-040-01-EA-021

Applicant: Bureau of Land Management, Anchorage Field Office

Type of
Action: Shaded Fuel Break and Defensible Space Construction

Location: Seward Meridian, T. 12 N., R. 3 W.

Sec. 2 $W\frac{1}{2}W\frac{1}{2}E\frac{1}{2}NW\frac{1}{4}$, $W\frac{1}{2}NW\frac{1}{4}$, $W\frac{1}{2}E\frac{1}{2}W\frac{1}{2}SW\frac{1}{4}$, $W\frac{1}{2}W\frac{1}{2}SW\frac{1}{4}$;

Sec. 3 Lots 1 through 4, inclusive, $S\frac{1}{2}N\frac{1}{2}NE\frac{1}{4}NE\frac{1}{4}$, $S\frac{1}{2}NE\frac{1}{4}NE\frac{1}{4}$,
 $S\frac{1}{2}SE\frac{1}{4}NW\frac{1}{4}NE\frac{1}{4}$, $S\frac{1}{2}NE\frac{1}{4}$, $S\frac{1}{2}NE\frac{1}{4}SE\frac{1}{4}NW\frac{1}{4}$, $SE\frac{1}{4}SE\frac{1}{4}NW\frac{1}{4}$,
 $S\frac{1}{2}SE\frac{1}{4}SW\frac{1}{4}NW\frac{1}{4}$, $S\frac{1}{2}SW\frac{1}{4}SE\frac{1}{4}NW\frac{1}{4}$, $SW\frac{1}{4}$, $E\frac{1}{2}SE\frac{1}{4}$

Sec. 10 $NE\frac{1}{4}NE\frac{1}{4}$, $E\frac{1}{2}NW\frac{1}{4}NE\frac{1}{4}$, $NW\frac{1}{4}NW\frac{1}{4}NE\frac{1}{4}$, $N\frac{1}{2}SW\frac{1}{4}NW\frac{1}{4}NE\frac{1}{4}$,
 $N\frac{1}{2}N\frac{1}{2}N\frac{1}{2}NW\frac{1}{4}$;

Sec. 11 $NW\frac{1}{4}NW\frac{1}{4}NW\frac{1}{4}$, $W\frac{1}{2}SW\frac{1}{4}NW\frac{1}{4}NW\frac{1}{4}$

Prepared By: Brian E. Sterbenz
Fire Management Specialist

Preparing
Office: Bureau of Land Management
Anchorage Field Office
6881 Abbott Loop Road
Anchorage, Alaska 99507

Date: July 30, 2001

I. INTRODUCTION

A. Purpose and Need for the Proposed Action:

Due to a spruce bark beetle epidemic there has been an increase of dead and dying white spruce trees in the Anchorage Bowl area. This has led to an increase in fire danger and a heightened awareness toward creating defensible space and fuel breaks in the Anchorage Bowl area. The Campbell Tract (CT) is a 730 acre tract of largely undeveloped land in the heart of Anchorage. The escape of a wildland fire from CT could threaten the surrounding area. Similarly, wildland fire from the surrounding area could threaten the Campbell Tract Facility (CTF). Reducing the hazard fuels and creating defensible space would allow suppression forces a greater probability of success in containing a wildland fire in the area.

B. Conformance With Land Use Plan:

The CT is within the geographic boundary of the Alaska Southcentral Planning Area Management Framework Plan (MFP), dated March 1980. The subjects of defensible space and fuel breaks are not specifically addressed in the MFP, however, the Proposed Action is consistent with the rationale found in the MFP decisions. Also, there is a management plan for the CTF titled “A Management Plan for Public Use and Resource Management on the Bureau of Land Management Campbell Tract Facility”, dated June 1988.

C. Relationship to Statutes, Regulations, Policies, Plans or Other Environmental Analyses:

The Proposed Action will be subject to Alaska State, Department of Environmental Conservation (DEC) regulations regarding smoke emissions from the ignition of slash piles in early winter or early spring. The Municipality of Anchorage (MOA) has a similar program to reduce fire danger on its park lands.

II. PROPOSED ACTION AND ALTERNATIVES

A. Proposed Action:

The Proposed Action is to create a defensible space around improvements on the CTF and a fuel break along the property lines. (See the attached map.) Hazard trees will also be removed one tree height from the edge of the trail or road surface on 11.2 miles of recreation and access roads. The project will begin in August and will continue for approximately 2-3 weeks. This will provide opportunities for suppression action using these breaks and reduce the encroachment or escape of a wildland fire to and/or from CTF. The hazard fuels to be included in the treatment are dead white and black spruce and dense black spruce stands.

Defensible space around facilities will be created by removing hazardous fuels from within one and one half the height (40-60 feet) of the dominant tree species (spruce).

All resulting slash will be transported to a central location for chipping and disposal by a contractor.

Given the proximity to trails and public recreation areas on CT, the goal is to create an effective fuel break that is also aesthetically pleasing. To accomplish this, all live hardwoods will be left uncut. Black and white spruce stands will be thinned to a minimum spacing of six feet with all dead trees removed in a corridor 80 feet wide. The lower branches on the remaining spruce trees will be pruned to five feet to eliminate ladder fuels. All resulting slash in areas accessible to vehicles will be transported to a central location for chipping and disposal by a contractor. Transport of the materials will occur mainly with All Terrain Vehicles (ATVs) and trailers or pickup trucks where applicable. The remaining areas will be piled with all material up to five inches in diameter for burning after the first snow fall. Material greater than five inches will be lopped and scattered outside the fuel break. The piles will be burned using a mixture of unleaded fuel and diesel fuel used for ignition. Fuel will be transported in small containers reducing the chance for a large fuel spill. All material under six inches, where feasible, will be chipped and removed along with material six inches and over to the MOA log sorting yard.

To improve access, a helispot will be constructed near the intersection of Sections 11, 2, 3, and 10 in the southeast corner of the CT to reduce suppression response time to wildland fire. The helispot will be large enough for a Type 2 helicopter (100 foot radius from center of touch down spot), and will use a natural opening with a slope conducive to helicopter landing to minimize the amount of disturbance to soil and live standing trees.

The project will be completed utilizing two 20 person crews from the Alaska Fire Service. They will be camped to the east of the main administration complex next to the existing heliport.

B. Alternative #1 - Viewpoint Trail Fuel Break:

This Alternative will be the same as the Proposed Action, except the fuel break will follow the Viewpoint Trail to where it intersects with the Coyote Trail. (See the attached map.) With this alternative the helispot will not be constructed near the intersection of Sections 11, 2, 3, and 10 in the southeast corner of the CT.

C. Alternative #2 - No Action:

The No Action Alternative is the continuation of present management. This Alternative will leave CT in its natural state and no wildland fire preventive measures would be undertaken. There would be no fuel break cleared, no defensible space cleared around

the administrative facilities, and no hazard trees removed. This will increase the potential of a catastrophic fire event either from a fire starting on the CT and spreading off or a fire from the surrounding area spreading onto the CT. It is not acceptable to BLM to not take any action to reduce the risk of fire to CT and the surrounding area. Therefore, the No Action Alternative will not be analyzed in further detail.

III. AFFECTED ENVIRONMENT

A. Critical Elements:

The following Critical Elements of the human environment are either not present or would not be affected by the Proposed Action or the Alternatives:

- Areas of Critical Environmental Concern (ACECs)
- Environmental Justice
- Farm Lands (prime or unique)
- Flood plains
- Invasive, Non-Native Species
- Native American Religious Concerns
- Threatened and Endangered (T&E) Species
- Water Quality, Surface and/or Ground
- Wild and Scenic Rivers
- Wilderness

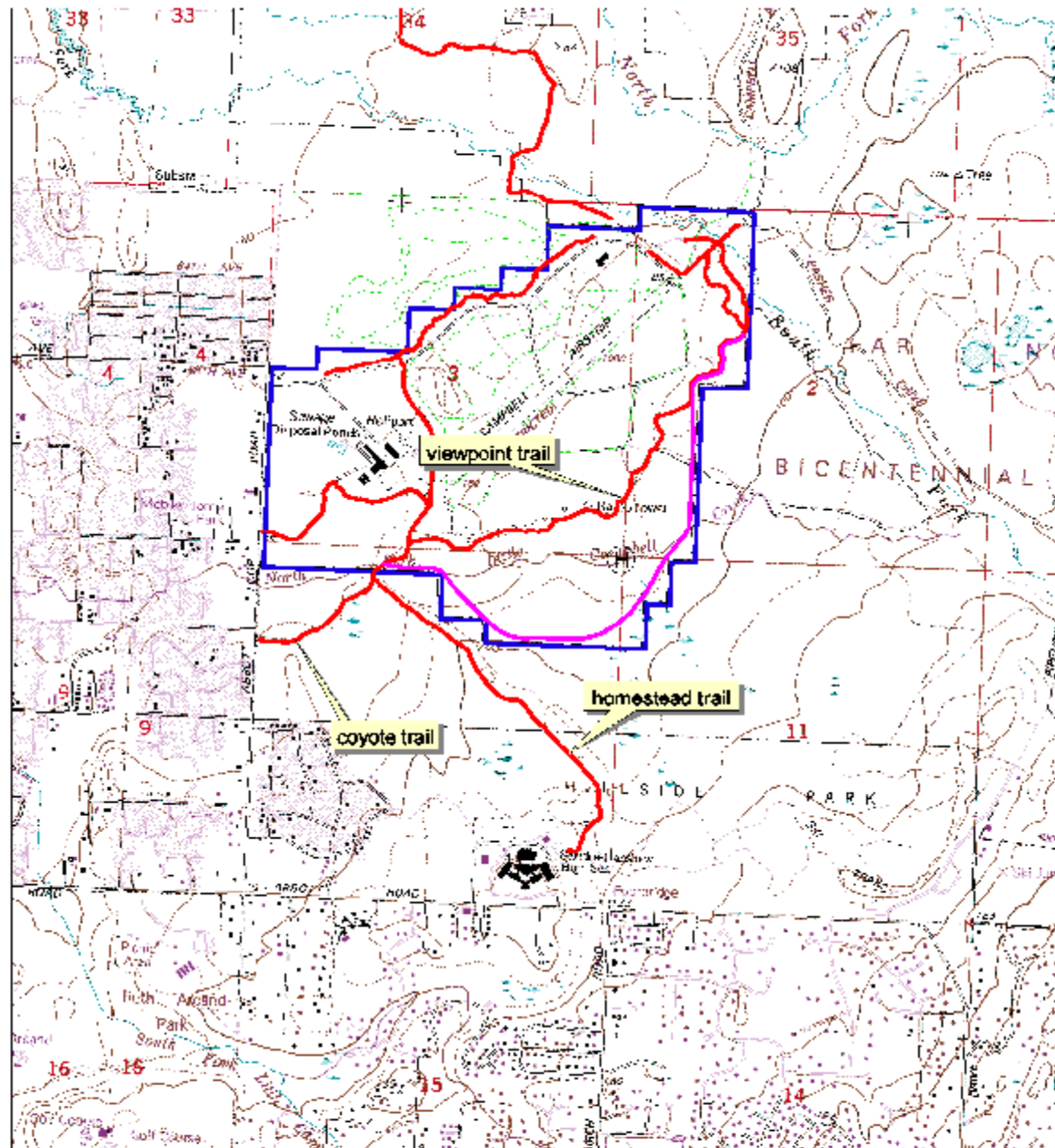
1. Cultural Resources:

Prehistoric Resources

No prehistoric resources have been identified on the CT. It lies within the territory claimed by the historic Dena'ina, an Athabaskan speaking people. Only spotty evidence of human use has been found indicating occupation prior to their entering the Cook Inlet area. Until approximately 11,000 years ago, glaciers covered the Anchorage bowl. The oldest site in the area dates to approximately 8,000-10,000 and 4,500 years ago at Beluga Point (Reger 1996).

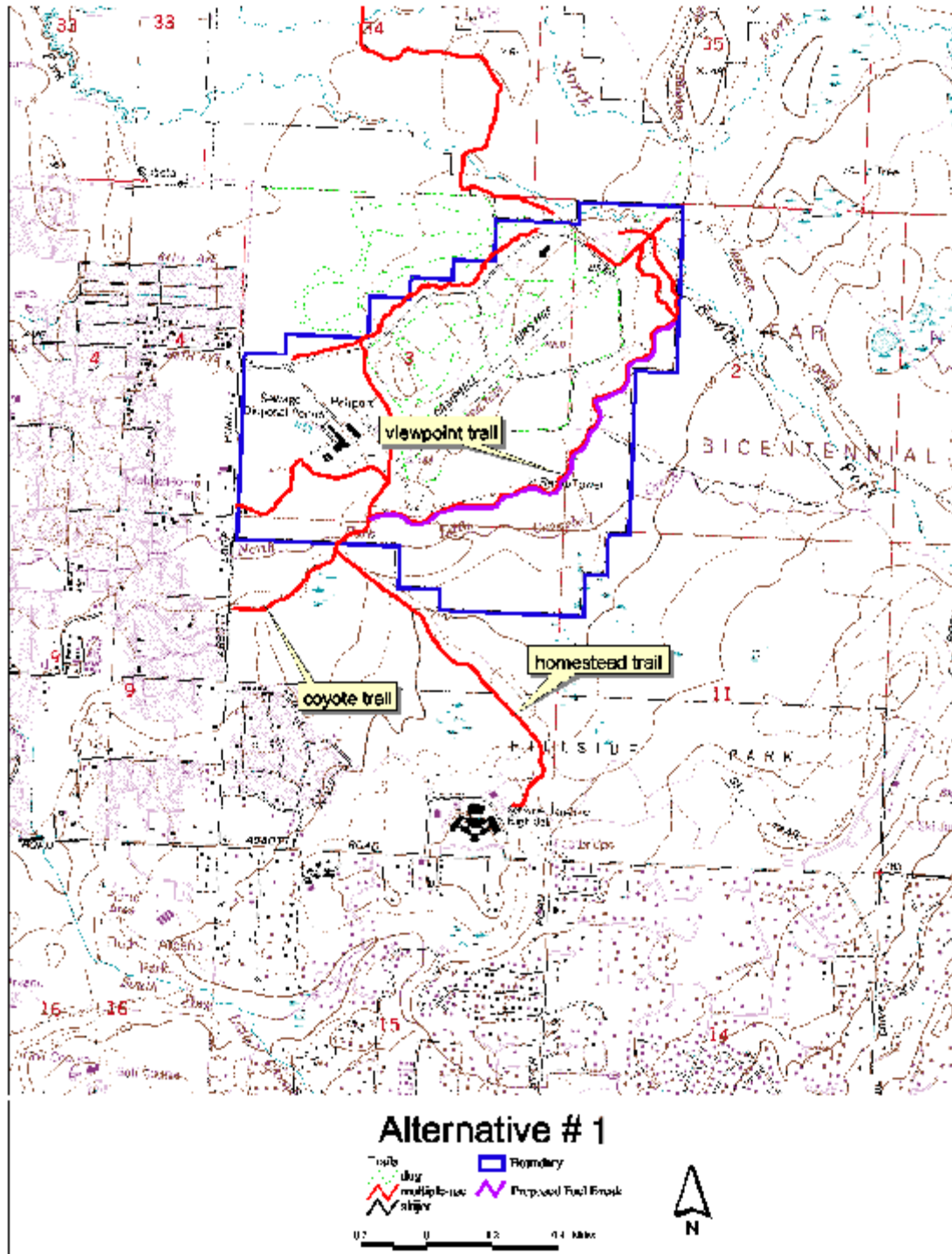
Early United States Period Resources

The CT takes its name from the creek that runs through it. The creek was first reported in 1906 by the United States Geological Survey (USGS). It was most likely named after Campbell Point which was named in 1794 by Joseph Whidbey, probably in honor of Sir Joseph Campbell, governor of Jamaica in 1785 (Orth 1971).



Proposed Action





Potter Trail

The Potter or Potter Creek Trail crossed the Anchorage bowl in a north-northeasterly direction. It started at Potter and followed the railroad for approximately four miles. It then crossed to the original railroad right-of-way which was never developed. This, in part, ran along the Campbell Airstrip. After crossing Campbell Creek the trail came to a junction with another old trail following upper Campbell Creek and then to the northwest into the old Anchorage town site. Post World War II development has obliterated most traces of this trail except those which still exist in the CT and the Far North Bicentennial Park (FNBP) (Carberry 1979).

World War II Resources

Construction for Fort Richardson was authorized in June 1940. By 1942 the need for satellite airfields to the base became apparent, and four satellite airfields were authorized. These 5,000 foot airfields with revetments and taxiways were located at Campbell Creek, Goose Bay, Birchwood and Willow (Bush 1984).

In June 1942, fifty men from the 138th Infantry Regiment arrived at the newly constructed Campbell Airfield. There was a temporary scarcity of Quonset huts so these soldiers constructed their own quarters off the northeastern end of the airstrip. These quarters were 10' x 16' sod huts built from locally available materials. During this early period at the airfield there were approximately 15 of these huts plus a mess hall, kitchen, guard huts and posts of the same basic construction (personal communication, F. Robert Grant). In December 1942, another camp was constructed on the south bank of Campbell Creek (Bush 1984). This garrison apparently consisted of Quonset huts and structures of more traditional building materials. Only the concrete foundations of the pump and power house identified on the 1943 Campbell Creek Garrison Map remain today. Another, more complex foundation, lies up the Viewpoint Trail from the power house, but its function and association has not been established. Elsewhere on the CT small pits have been located on the hillside overlooking the 1943 garrison camp. Several shallow, rectangular depressions in the area of the original encampments have been identified. Two large, deep, angular pits and the remains of a latrine have been located near the revetment now used as the parking lot for the Campbell Creek Science Center (CCSC), and another latrine and some unidentified earthworks have been located between the airstrip and the CCSC road. Several burn pit/can dumps have been identified and seem to be associated with the airstrip and some of the revetments. Preliminary observations of the material in these can dumps appear

to date exclusively to the 1970's when the CT was used as a center for wild fire operations, however, older material may lay deeper.

2. Subsistence:

The CT lands are Federal Public Land as defined in the Alaska National Interest Lands Conservation Act (ANILCA), Section 810 and fall under the authority of the Federal Subsistence Board and the Subsistence Regulations for the Harvest of Fish and Wildlife on Federal Public Lands in Alaska. The CT lies within the Anchorage Management Unit of Game Management Unit 14C which under the current Subsistence Regulations noted above is closed to the taking of wildlife under both State (hunting and trapping) and Federal Subsistence Regulations. Further, the taking of wildlife on the CT is limited by Supplemental Rules issued on November 20, 1998 under 43 CFR 8365.1-6 that closed the CT to the use of firearms, archery equipment, traps or snares. The CT has no documented consistent use by rural Alaskans of fish or game and no knowledge of such use has become available since the inception of the Federal Subsistence Program or the issuance of the above noted Supplementary Rules.

3. Air Quality:

Air quality has not been pristine in the Anchorage area since the early 1900's when population increases in the area began. However, air quality varies with season and atmospheric conditions. Fire scars on the CT, as well as historical accounts, indicate the presence of natural fires and evidence of fires set by the human population of the area. Since the early 1940's, levels of smoke may have decreased as fire was, for the most part, excluded by organized fire suppression. In the proposed project area, there are no Class I air sheds, or special protection areas such as wilderness areas. Anchorage is designated through the Clean Air Act as a non-attainment area for carbon monoxide. However, the legal description of the Anchorage non-attainment area does not include the CT.

4. Wetland/Riparian Zones:

The CT has two riparian areas located within its boundaries. The larger area is located along the South Fork of Campbell Creek on the northeast side of CT, with the other smaller area being located along Little Campbell Creek in the southern portion of CT.

5. Wastes (Hazardous/Solid):

The following hazardous materials will be used: drip torches - 6, drip torch fuel - 50 gallons, fusees - 1 box, premix fuel for chainsaws - 120 gallons and bar oil - 60 gallons. Appropriate spill response equipment will be available in storage areas and at fuel transfer sites. Hazardous materials will be handled only by trained personnel. No extremely hazardous substances as defined in 40 CFR 355 are associated with the Proposed Action or alternative. Less than 10,000 pounds of chemicals subject to reporting under Title III of SARA (40 CFR 370) are associated with this project.

B. Fisheries:

Over 6,000 feet of the South Fork of Campbell and Little Campbell Creeks run through the northeast and southern portions of the CT, respectively. Both are non-glacial systems that are listed in the Alaska Department of Fish and Game's (ADF&G) "Catalog of Waters Important for Spawning, Rearing or Migration of Anadromous Fishes".

Anadromous fish species that use the South Fork Campbell Creek include chinook, pink and coho salmon. The Atlas associated with the Catalog indicates that coho, chinook and pink salmon are seasonally present. The spawning and rearing phases of chinook and the rearing phase of coho have been documented as occurring in the creek. Other species inhabiting the creek include rainbow trout, Dolly Varden, and slimy sculpin. Little Campbell Creek is a known rearing habitat for coho salmon.

C. Recreation:

The CT is a Special Recreation Management Area (SRMA) for non-motorized recreation use. Recreation management of the CT is directed by the "Management Plan for Public Use and Resource Management on the BLM Campbell Tract". There are approximately 11.2 miles of developed trails on the CT. Some of these trails link to other trails on the adjoining FNNP. The proximity of the CT to urban Anchorage places demands on the site from a variety of users. Most recreation use occurs on the trails that were developed on old military tank trails and airplane taxiways. Access for recreation use occurs from the Campbell Airstrip Road and CT entrance road parking areas. Trail maintenance and signing is a cooperative effort between the user groups, the BLM and the MOA's Parks and Recreation Division.

Recreation users are primarily residents from Anchorage and surrounding communities. The estimated number of user days in 1999 was 35,000. Many users live close to the CT and use the area regularly for exercise, often with dogs or on horses, and training for dog mushing, skiing, running and cycling. Competitive events, including the Nordic

Ski Club's Tour of Anchorage and the World Sled Dog Championship races, attract local, National and international entrants.

The type of recreation use changes with the seasons. During the snow season, use is predominantly dog mushers, skiers, and ski jorers with lesser use by horse riders, joggers and walkers, including people walking pets. CT contains an important part of the Alaska Sled Dog Racing Association (ASDRA) trail system. In the winter, the trail is used intensively for training and competitive dog mushing events. The World Sled Dog Championship races are held annually during Fur Rendezvous on the CT and the MOA trail system. Trails are groomed by the Nordic Ski Club, the North American Skijoring and Ski Pulk Association (NASSPA), the ASDRA and the BLM.

During the rest of the year, walkers, including people walking pets, joggers, cyclists and horse riders are the primary CT users. A small number of competitive and organized events are held during the snow-free season.

The CT serves as the outdoor classroom for the CCSC. There are approximately 21,000 user days at the CCSC and outdoor classroom. Much of the use is associated with the Anchorage School District, Outdoor Week, Trailside Discovery and commercial users.

D. Soils:

The soils of CT are typically gravelly, well drained glacial drift with an overlying mantle of silty loess about 5 to 18 inches thick. These soils typically have a thin, gray silt upper layer over reddish brown to yellowish brown layers about 6 to 12 inches thick. The lower part of these layers and the substratum consist of very gravelly sand or sandy loam that contains many stones and boulders. Soils along Campbell Creek are moderately deep to deep and well drained. They support a forest of cottonwood, white spruce and birch with an under story of alder, willow and other shrubs. In a few places these same soils are less well drained and form wet depressions sometimes filled with water and support mainly black spruce, low shrubs, mosses and sedges.

Well drained sites have few or moderate limitations for building or other types of construction and are capable of producing commercial stands of timber. (USDA, SCS Exploratory Soil Survey of Alaska, 1979.)

E. Vegetation:

The native vegetation on the CT is a result of the maritime subarctic climate, soil types, and previous disturbance. Plant communities that are typical of south-central Alaska and the subarctic environment are found on the CT. The vegetation mosaic is the result of human activities, primarily military use during the 1940's and 1950's, that disturbed existing native plant communities. Abandoned, disturbed areas are gradually following a successional pattern back to climax forest conditions.

The under story vegetation consists of forbs, lichens, mosses and fungi, and occasional woody shrubs. Most of the CT has well-drained soils with a dominant over story of mature white spruce and white birch. In areas previously disturbed, alder and other hardwoods such as birch, aspen and cottonwood have become established. Areas with poorly drained soils generally support an over story of black spruce with an under story of sphagnum moss and sedges. Riparian areas near Campbell Creek support a population of black cottonwood and mixed spruce/hardwood forest with a diverse under story of alder and other woody shrubs.

A high percentage of the mature white spruce on the CT have been killed by spruce bark beetles. Many trees greater than eight inches in diameter will eventually die as a result of beetle attacks. As these trees fall, less susceptible younger spruce and birch will tend to replace the spruce. Mixed spruce/hardwood stands will tend to become dominated by birch or other hardwoods.

F. Visual Resources:

Scenic quality is best described as the overall impression retained after traveling through or being within an area of land. The visual resources in the project area can be divided into two categories of scenic quality. The area surrounding the administrative compound, which includes administrative offices and warehouse buildings, is Class C scenic quality and the remaining, less developed area, is Class B.

Some of the less developed portions of CT contain areas that have been historically disturbed by man-made intrusions. These include an airstrip, taxi-ways, airplane parking pads, tank trails, secondary roads and communication sites. With the exception of the airstrip, the road to the CCSC, and maintained multiple use trails, have largely re-vegetated. In many cases, the open areas have contributed to the scenic quality of the area by offering vistas of the Chugach Mountains and visual relief from the surrounding thick woods and forest canopy. Overall there is a predominant rural visual setting within this area. Recreation use that occurs on the designated trail system can be assured a quality visual experience free from modern intrusions.

G. Wildlife:

The CT provides habitat for most of the terrestrial animal species found in south central Alaska. Moose are common and use the CT for calving in spring and wintering habitat. Black bear, brown bear and wolf use the CT and move from higher elevations during seasonal changes, or in search of food sources such as berries, salmon and moose calves. Snowshoe hares are abundant and support a lynx population that cycles with the hare population. Coyotes are seen or heard regularly and breed in the area. Other animals that live and breed on the CT include lynx, beaver, red fox, porcupine, red squirrel, wood frog and several species of microtine rodents.

There are 20 bird species that are year-round residents, and an additional 21 migrant species that breed here. Three species of owl breed in the CT's forest habitats, and bald eagles nest in adjacent areas and use the CT's prey base to raise young. Thirty-three species of resident and migrant land birds have been documented using the CT's forest and shrub habitats during fall migration through studies using mist netting and bird banding. The olive-sided flycatcher, gray-cheeked thrush, Townsend's warbler and blackpoll warbler move through the CT during fall migration and are included on the State of Alaska's list for Species of Special Concern.

CT provides cover habitat and food for many wildlife species. It serves as a buffer and migration corridor, particularly for moose and bear, between urban areas and Chugach State Park reducing wildlife conflicts with people. The CT is a recognized watchable wildlife site, and is key to the "Living with Wildlife in Anchorage" cooperative planning effort which includes a memorandum of understanding (MOU) with three State and six Federal agencies.

IV. ENVIRONMENTAL CONSEQUENCES

A. Impacts of the Proposed Action - Perimeter Fuel Break:1. Critical Elements:a. Cultural Resources:

No impacts to cultural resources are anticipated with the construction of defensible space and the shaded fuel break.

b. Subsistence:

The Proposed Action would not measurably restrict subsistence uses, decrease the abundance of subsistence resources, alter the distribution of subsistence resources, or limit subsistence user access from currently existing conditions. Presently, there are no known users of subsistence resources.

c. Air Quality:

During the construction of defensible space and the fuel break, air quality will remain at normal levels. If slash piles are burned within the prescription parameters, air quality should not be measurably affected as mixing heights and transport winds will disperse the smoke that is created through the combustion process. Air quality will be maintained through proper implementation of the burning prescription as set forth in the burn plan.

d. Waste, Hazardous or Solid:

Due to the small amounts of hazardous materials required to complete the Proposed Action, any fuel spills that may occur can be mitigated through the use of containment dikes, contained fuel transfer sites and the appropriate sized spill response kits.

There is the potential for fuel or oil to be spilled during the filling of chainsaws or drip torches. Any spills will contaminate soils and kill vegetation. Since only small quantities will be used, there is no potential for a large spill. Spill response equipment will be available reducing the likelihood of a large area being impacted.

2. Fisheries:

The Proposed Action will not affect the South Fork of Campbell Creek as the project area does not include the creek area. The area of Little Campbell Creek where the proposed line will intersect and cross the creek is relatively open and will require little vegetative modification causing minimal impact on the creek.

3. Recreation:

There is the potential that the fuel break will become a new trail. This may occur at the intersections where the fuel break will intersect existing trails. The fuel break will not be connected to the existing trail system. At these points the existing vegetation will be left undisturbed 60 to 100 feet from the end or the edge of the fuel break as a buffer to deter new trail pioneering. There may be some disruption of recreation use in the area of the fuel break where crews are working. Noise from chainsaws will decrease the solitude of any recreation users in the area.

4. Soils:

Some disturbance to soils will occur from vehicles removing logs or slash. This may result in compacting soil or creating ruts. Disturbance will be reduced by confining use to existing roads or trails and staying off these routes if they are wet or muddy. Soil disturbance from falling trees and stacking slash will be slight.

5. Vegetation:

Mature spruce will continue to decline due to spruce bark beetle infestation. Stands of spruce tend to be replaced by a mixed hardwood stand of paper birch, aspen, and small diameter white spruce. Riparian areas would continue to be dominated by black spruce, cottonwood and other hardwoods. Since timber harvesting is not allowed, dead spruce would contribute to a short-term increase in the potential for wildfire. As hardwood stands become more established with a lesser spruce component, potential for wildfire would decrease. Species diversity would be maintained at current levels under the Proposed Action. Some damage to vegetation will occur from vehicle travel to remove logs and slash and by being crushed by falling trees. Areas along the fuel break will receive more light and space. Shrub and grass vegetation will benefit from increased light and space. Trees in or along the fuel break will also benefit.

6. Visual Resources:

Due to the gradually sloping terrain found in the project area and the buffer zones at the trail intersections, the visual resource will be minimally impacted for trail users. The view from surrounding upland areas will also be minimally impacted due to the amount of trees that will remain in the fuel break.

7. Wildlife:

There is a raven nest located on the Lore Road Trail to the southwest of the BLM administrative site. Defensible space will be constructed in a way that will not impact this nesting site. There are also up to 30 varieties of song birds that nest or migrate through the area. The construction of the fuel break will occur after these birds have nested and before many of the migratory birds have started to move through CT. There will be some loss of wildlife habitat as dead trees are removed. Some bird species may be displaced into adjoining non-disturbed habitat. The expected increase in shrub and deciduous trees from opening up the forest will increase moose habitat.

B. Cumulative Impacts of the Proposed Action - Perimeter Fuel Break:

The fuel utilized to complete the project plus the burning of slash will add to the particulate and chemical pollution in the Anchorage Bowl. The amount of pollutant will be very small and of short duration. Burning during periods of favorable weather will reduce the cumulative impacts.

C. Mitigation Measures for the Proposed Action - Perimeter Fuel Break:

Recreation users must be kept informed of the status of the project and location of the work. This can be accomplished by signing. Soils must not be driven on while wet to reduce compacting and rutting. Damaged areas must be smoothed and stabilized by mulching and/or revegetated. Any areas where vegetation is removed must be protected and or revegetated.

D. Impacts of Alternative #1 - Viewpoint Trail Fuel Break:

1. Critical Elements:

a. Cultural Resources:

No impacts to cultural resources are anticipated with the construction of defensible space and the shaded fuel break.

b. Subsistence:

Alternative #1 would not measurably restrict subsistence uses, decrease the abundance of subsistence resources, alter the distribution of subsistence resources, or limit subsistence user access from currently existing conditions. Presently, there are no known users of subsistence resources.

c. Air Quality:

During the construction of defensible space and the fuel break, air quality will remain at normal levels. If slash piles are burned within the prescription parameters, air quality should not be measurably affected as mixing heights and transport winds will disperse the smoke that is created through the combustion process. Air quality will be maintained through proper implementation of the burning prescription as set forth in the burn plan.

d. Waste, Hazardous or Solid:

Due to the small amounts of hazardous materials required to complete the Proposed Action, any fuel spills that may occur can be mitigated through the use of containment dikes, contained fuel transfer sites and the appropriate sized spill response kits.

There is the potential for fuel or oil to be spilled during the filling of chainsaws or drip torches. Any spills will contaminate soils and kill vegetation. Since only small quantities will be used, there is no potential for a large spill. Spill response equipment will be available reducing the likelihood of a large area being impacted.

2. Fisheries:

This alternative will have little or no impact on fisheries as the proposed fuel break follows an existing trail.

3. Recreation:

Impacts to recreation from this alternative would consist of making the Viewpoint Trail corridor more park-like resulting in less of a wilderness feeling to the users of the trail. There may be some disruption of recreation use in the area of the fuel break where crews are working. Noise from chainsaws will decrease the solitude of any recreation users in the area.

4. Soils:

Some disturbance to soils will occur from vehicles removing logs or slash. This may result in compacting soil or creating ruts. Disturbance will be reduced by confining use to existing roads or trails and staying off these routes if they are wet or muddy. Soil disturbance from falling trees and stacking slash will be slight.

5. Vegetation:

Mature spruce will continue to decline due to spruce bark beetle infestation. Stands of spruce tend to be replaced by a mixed hardwood stand of paper birch, aspen, and small diameter white spruce. Riparian areas would continue to be dominated by black spruce, cottonwood and other hardwoods. Since timber harvesting is not allowed, dead spruce would contribute to a short-term increase in the potential for wildfire. As hardwood stands become more established with a lesser spruce component, potential for wildfire would decrease. Species diversity would be maintained at current levels under this alternative. Some damage to vegetation will occur from vehicle travel to remove logs and slash and by being crushed by falling trees. Areas along the fuel break will receive more light and space. Shrub and grass vegetation will benefit from increased light and space. Trees in or along the fuel break will also benefit.

6. Visual Resources:

By opening the area on either side of the trail the recreation experience may be altered from a wilderness type to more of a park type. By thinning the vegetation along the trail this may provide the user with opportunities for improved scenic views

7. Wildlife:

There is a raven nest located on the Lore Road Trail to the southwest of the BLM administrative site. Defensible space will be constructed in a way that will not impact this nesting site. There are also up to 30 varieties of song birds that nest or migrate through the area. The construction of the fuel break will occur after these birds have nested and before many of the migratory birds have started to move through CT. There will be some loss of wildlife habitat as dead trees are removed. Some bird species may be displaced into adjoining non-disturbed habitat. The expected increase in shrub and deciduous trees from opening up the forest will increase moose habitat.

E. Cumulative Impacts of Alternative #1 - Viewpoint Trail Fuel Break:

The fuel utilized to complete the project plus the burning of slash will add to the particulate and chemical pollution in the Anchorage Bowl. The amount of pollutant will be very small and of short duration. Burning during periods of favorable weather will reduce the cumulative impacts.

F. Mitigation Measures for Alternative #1 - Viewpoint Trail Fuel Break :

Recreation users must be kept informed of the status of the project and location of the work. This can be accomplished by signing. Soils must not be driven on while wet to reduce compacting and rutting. Damaged areas must be smoothed and stabilized by mulching and/or revegetated. Any areas where vegetation is removed must be protected and or revegetated.

V. CONSULTATION AND COORDINATION

A. Persons and Agencies Consulted:

There was an early addition of the Campbell Tract Leaf published with a brief description of the activities plan and an announcement of a scheduled open meeting on July 30, 2001. There were three notices published in the Anchorage Daily News, one per day starting July 27, 2001 and ending July 29, 2001.

B. List of Preparers:

Debbie Blank - Vegetation
Jeff Denton - Subsistence

Dave Kelley - Soils
Donna Redding - Cultural Resources
Jake Schlapfer - Recreation and Visual Resources
Mike Scott - Fisheries
Bruce Seppi - Wildlife
Paxton McClurg - Graphics/Illustration
Mike Zaidlicz - Vegetation/Forestry

Glossary

Defensible Space	A cleared area surrounding an improvement that allows for defense of the improvement from wildland fires.
Class 1 airspace	The airspace around specified National Parks, wilderness areas, and certain Indian reservations.

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